



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,829	01/29/2007	Heike Strobel	PLP575USw	8382

23347 7590 04/01/2010
GLAXOSMITHKLINE
CORPORATE INTELLECTUAL PROPERTY, MAI B482
FIVE MOORE DR., PO BOX 13398
RESEARCH TRIANGLE PARK, NC 27709-3398

EXAMINER

GRASER, JENNIFER E

ART UNIT	PAPER NUMBER
----------	--------------

1645

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/01/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USCIPRTP@GSK.COM
LAURA.M.MCCULLEN@GSK.COM
ELAINE.X.MARTENS@GSK.COM

Office Action Summary	Application No. 10/590,829	Applicant(s) STROBEL ET AL.	
	Examiner Jennifer E. Graser	Art Unit 1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-62 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-62 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-20, drawn to a process for reducing the spontaneous mutation frequencies in a cell or organism by introducing at least two mutations whose combined actions lead to at least two enhanced cellular DNA repair mechanisms, into the cell or organism. **NOTE: If this group is elected, Applicant must also elect the type of cell or organism (e.g., prokaryotic cell) and the at least two mutations or the two enhanced cellular DNA repair mechanisms. This is not a species election, but is a Restriction Requirement.**

Group II, claim(s) 21 and 22, drawn to a cell with reduced spontaneous frequencies and/or enhanced cellular viability wherein the cell comprises at least two mutations. **NOTE: If this group is elected, Applicant must also elect the type of cell or organism (e.g., prokaryotic cell) and the at least two mutations or the two enhanced cellular DNA repair mechanisms. This is not a species election, but is a Restriction Requirement.**

Group III, claim(s) 23, drawn to an organism with reduced spontaneous frequencies wherein the cells of the organism comprise at least at least two mutations whose combined actions lead to at least two enhanced cellular DNA repair mechanisms. **NOTE: If this group is elected, Applicant must also elect the at least two mutations or the two enhanced cellular DNA repair mechanisms. This is not a species election, but is a Restriction Requirement.**

Group IV, claim(s) 24, drawn to *E. coli* MG1655dinB10 containing plasmid pmutL (DSM 17016)..

Group V, claim(s) 25, drawn to *E. coli* MG1655dinB10 *mutL::tet* containing plasmid pmutL (DSM 17017).

Art Unit: 1645

Group VI, claim(s) 26, drawn to *E. coli* MG1655 *dnaE zae::cm* containing plasmid pmutL (DSM 17018).

Group VII, claim(s) 27, drawn to *E. Coli* MG1655 *dnaE zae::cm mutL::tet* containing plasmid pmutL (DSM 17019). **

Group VIII, claim(s) 28, drawn to *E.coli* MG1655dinB10 *dnaE zae::cm* (DSM 17015)..

Group IX, claim(s) 29, drawn to *E. coli* MG1655dinB10 *dnaE zae::cm mutL::tet* (DSM 17014).

Group X, claim(s) 30, drawn to *E. coli* MG1655dinB10 *dnaE zae::cm* containing plasmid pmutL (DSM 17020).

Group 11, claim(s) 31, drawn to to *E. coli* MG1655dinB10 *dnaE zae::cm mutL::tet* containing plasmid pmutL (DSM 17021).

Group 12, claim(s) 32-39 and 42-60, drawn to a process for the generation of an expression system for a protein (and the process of making the protein using the expression system) wherein the amino acid sequence of the protein is stabilized against spontaneously occurring mutations...NOTE: **NOTE: If this group is elected, Applicant must also elect the at least two mutations or the two enhanced cellular DNA repair mechanisms which are present in the host cell. This is not a species election, but is a Restriction Requirement.**

Group 13, claim(s) 40-41, drawn to a process for the production of a fermentation product by cultivating a cell producing the fermentation product and/or at least one enzyme involved in the formation of the fermentation product in a medium wherein the genome of the cell is stabilized against spontaneously occurring sequence changes by at least two mutations whose combined actions lead to at least two enhanced cellular DNA repair mechanisms. : **NOTE: If this group is elected, Applicant must also elect the at least two mutations or the two enhanced cellular DNA repair mechanisms which are present in the host cell. This is not a species election, but is a Restriction Requirement.**

Group 14, claim(s) 61, drawn to a protein. The product is not rendered novel by the fact that it is produced by a novel process which does nothing to change the structure of the ultimate product.

Art Unit: 1645

Group 15, claim(s) 62, drawn to a fermentation product. The product is not rendered novel by the fact that it is produced by a novel process which does nothing to change the structure of the ultimate product.

2. The inventions listed as Groups I-15 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I-15 lack the same corresponding or special technical features.

Additionally, there are patentably distinct products/methods contained **within** each of these groups as set forth above. It is noted that this election requirement is a restriction requirement and not a species election requirement. Groups 2-11, 14 and 15 are drawn to products which are biologically, chemically, and structurally different and therefore are different special technical features. An organism, such as a plant or mammal, is very structurally different than a cell. Additionally, the E.coli cells recited in Groups IV-II are also structurally different and the different mutations render the cells unique. Groups I, 12 and 13 are methods which are drawn to the production of completely different products. Accordingly, these groups lack the same or corresponding special technical feature and do not relate to a single general inventive concept.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

Art Unit: 1645

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Correspondence regarding this application should be directed to Group Art Unit 1645. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Group 1600 via the PTO Fax Center located in Remsen. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Group 1645 Fax number is 571-273-8300 which is able to receive transmissions 24 hours/day, 7 days/week.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1645

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E. Graser whose telephone number is (571) 272-0858. The examiner can normally be reached on Monday-Thursday from 8:00 AM-6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Mondesi, can be reached on (571) 272-0956.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-0500.

/Jennifer E. Graser/
Primary Examiner, Art Unit 1645

3/24/10